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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/406,087	09/24/1999	RYOTA AKIYAMA	1341.1030/JD	1217

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EXAMINER

BROWN, CHRISTOPHER J

ART UNIT PAPER NUMBER

2134

DATE MAILED: 06/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/406,087

Applicant(s)

AKIYAMA ET AL.

Examiner

Christopher J Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, and 11, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlafly US 5,299,197 in view of Rosenthal US 5,359,659

As per claims 1, 6 and 11, Schlafly discloses a first authenticator creating unit (server) for dividing the information into a plurality of data (packets). Schlafly discloses that each has a prespecified length (length field). Schlafly discloses that the authenticators are created by applying a one way function (hash, checksum) to each of the divided data. Schlafly discloses linking the authenticators to the divided data (in packet field). Schlafly discloses a certifying unit that recalculates the authenticator and checking to see that the recalculated authenticator data matches the send authenticator data.

Schlafly does not disclose using a different one way hash on each of the divided data.

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Rosenthal discloses using a variety of different checksum calculation methods, (Col 9 lines 43-55). It would be obvious to one skilled in the art to modify the signing system of Schlafly with the multiple checksum calculation methods of Rosenthal because the possibility of undetected tampering is limited, (Rosenthal Col 9 line 56).

As per claims 24-26, Schlafly discloses the data may be document data,(image), (Col 3 lines 35-40).

Claims 2-5, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlafly in view of Rosenthal US 5,359,659 in view of Dolan US 5,604,801

The previous Schlafly-Rosenthal combination does not disclose truncation. Dolan discloses generating a digital signature made up of an encrypted hash of the message, (Col 6 lines 1-12). The digital signature is a second authenticator, made of the original message, which contains the first authenticator.

It would be obvious to modify the Schlafly-Rosenthal combination with Dolan's digital signature so the receiver will be able to authenticate the sender, thus making the transmission more secure.

As per claims 3, and 8, Rosenthal discloses using random keys in the authenticator generation, (Col 9 line 45).

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Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlafly in view of Rosenthal US 5,359,659 in view of Dolan US 5,604,801 in view of Bellare US 5,757,913

As per claims 4 and 9, the previous Schlafly-Rosenthal-Dolan combination does not disclose parallel processing.

Bellare discloses parallel processing, (Col 1 lines 60-65).

It would have been obvious to one of ordinary skill in the art to modify the Schlafly-Rosenthal-Dolan combination with Bellare's parallel processing to improve speed and efficiency

Independent claims 12-23 are rejected based on the rejections stated above.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,297,208 also contains information on separating and hashing each element.

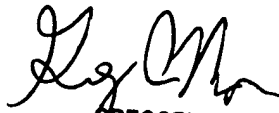
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J Brown whose telephone number is 703-305-8023. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher J. Brown



GREGORY MORSE
SUPERVISORY PATENT EXAMINER
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